

Abstract of the Disclosure

A texture description method in a frequency domain for extracting texture features by transforming and Gabor-filtering an input image into an image of the frequency domain, and a texture-based retrieval method thereof are provided. The texture description method in the frequency domain includes: a first step of transforming an image of a time domain into an image of the frequency domain; a second step of filtering the transformed image using a Gabor filter having $N \times M$ filter regions, where N and M are respective predetermined positive integers; a third step of extracting feature values of the image that has been Gabor-filtered in respective channels of the frequency domain division layout corresponding to the $N \times M$ filter regions of the Gabor filter; and a fourth step of deciding a texture descriptor of the image on the basis of the feature values of the image.